

## **ABSTRACT**

1        Heat is applied to a conductive structure that includes  
2        one or more vias, and the temperature at or near the point of  
3        heat application is measured. The measured temperature  
4        indicates the integrity or the defectiveness of various features  
5        (e.g. vias and/or traces) in the conductive structure, near the  
6        point of heat application. Specifically, a higher temperature  
7        measurement (as compared to a measurement in a reference  
8        structure) indicates a reduced heat transfer from the point of  
9        heat application, and therefore indicates a defect. The  
10       reference structure can be in the same die as the conductive  
11       structure (e.g. to provide a baseline) or outside the die but in  
12       the same wafer (e.g. in a test structure) or outside the wafer  
13       (e.g. in a reference wafer), depending on the embodiment.